

2,102
**Part "Principles of
Financial Management"**

Responsible lecturer: Simon Pfister, Ph.D. HSG
Time: 135 minutes

Number of pages:

Question sheets (incl. cover sheet):	18
Excerpt Annual Report for Case Study:	7
Solution sheets (incl. cover sheet):	13
Multiple-choice answer sheet:	1

BA B Assessment Year Exam Spring Semester 2021

Please carefully consider the following points when completing this exam!

1. Read *every question* closely *before* writing down your answers. The purpose of the exam is not the rote reproduction of specific slides from the script.
2. Greater weight is given to *brief statements and arguments* that answer the questions precisely. No points are awarded for “selections of samples” that excessively span a question’s area of possible answers and relevant aspects, even if the correct answer is actually among many unnecessary or incorrect statements.
3. Under *no circumstances* should the exam be written in pencil, red pen or red ink.
4. Please be sure to keep your writing legible.
5. Please note that all of the questions disregard Value Added Taxes (VAT), i.e. VAT does not apply in any of the questions.
6. Please write your answers on **the solution sheets** designated for that purpose and NOT on the exercise sheets.
7. Please write your **name** and **matriculation number** on the solution sheets.

Good luck!

Question	Topic	Max. points
1	Short questions Financial Management	30
2	Statement of Cash Flows	17
3	Case Study Laureate Education, Inc.	27
4	Company valuation Online Education, Inc.	16
5	Multiple-Choice questions	45
	TOTAL	135

	Part „Principles of Financial Management”	135
1	Short questions Financial Management Answer the following short questions with keywords .	30
1.1	Name three asset positions which likely change for companies during a crisis like the COVID pandemic, and explain why and how.	3
1.2	Name and explain two reasons why and how the audit report bridges the asymmetric information between principles and agents.	2
1.3	What is the difference between depreciation and impairment? Explain the difference and provide an example for each of the two.	4
1.4	The gross contribution margin of the «Profit Ltd.» is 40%. What is the security coefficient if currently 50 000 items are sold at a price of CHF 160, and with fixed costs of CHF 2.88 million?	5
1.5	In how far can provision be seen as a financing instrument? Name the options for inside and outside financing, and explain the disadvantages of using provisions for financing purpose.	4
1.6	Explain the advantages and disadvantages, as well as the function of liability and equity. Also, explain if financing an acquisition with outside liabilities, as Geberit did for a significant part of financing for the acquisition of Sanitec, is seen for a majority of acquisitions and why Geberit has chosen financing with outside liabilities.	4
1.7	Why do practitioners use the DCF and Multiple methods for company valuation at the same time? Explain the advantages and disadvantages of both methods and how they are complementary.	4
1.8	In how far does leeway exist in financial reporting, which allows influencing the profit reported in the statement of profit or loss and in the statement of financial position? Use two examples to explain how they can be used to influence the profit.	4

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Statement of Cash Flows «Cash Ltd.»

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Statement of Financial Position	Dec 31, 2020 million CHF	Dec 31, 2019 million CHF	change million CHF
Cash and cash equivalents	79	50	29
Receivables	13	11	2
Inventory and work in progress	18	13	5
Total current assets	110	74	36
Financial assets	5	11	-6
Tangible assets	27	29	-2
Intangible assets	8	5	3
Total non-current assets	40	45	-5
Total assets	150	119	31
Payables	19	17	2
Loans	7	8	-1
Provisions	6	4	2
Total liabilities	32	29	3
Shareholders' capital	67	67	0
Profit brought forward	18	9	9
Profit of the year	33	14	19
Total equity	118	90	28
Total liabilities & equity	150	119	31

Statement of Profit or Loss	2020 million CHF	2019 million CHF
Revenues	281	269
Changes in inventories (semi-)finished goods	6	2
Net revenues	287	271
Material and advertising expenses	-161	-153
Personnel expenses	-74	-70
Other operating expenses	-3	-22
Depreciation on tangible assets	-12	-6
Amortization on intangible assets	-3	-5
EBIT	34	15
Financial result	6	2
Tax	-7	-3
Profit of the year	33	14

2.1	<i>Preparation of Statement of Cash Flows</i> Prepare the Statement of Cash Flows for the year 2020 with the information from the Statement of Profit or Loss and the Statement of Financial Position, using the scheme in the solution sheets. In the year 2020 and in the previous years, a dividend of CHF 5 million was paid out. Assume that the decrease in financial assets results from selling of financial assets. REMEMBER: no points apply for empty fields.	9
2.2	<i>Free Cash Flow and Financing</i> What is the Free Cash Flow of the company using the calculation method discussed in the lecture? Explain where and how the decisions regarding outside financing as well as the potential for inside financing can be seen. How do you overall assess the Free Cash Flow and the Statement of Cash Flows of «Cash Ltd.»?	6
2.3	<i>Dividend</i> To which profit does the CHF 5 million dividend paid in 2020 relate? Explain your answer.	2

3	Case Study Laureate Education, Inc. Laureate Education, Inc. is a higher education organization listed at the NASDAQ stock exchange in New York, providing higher education in mainly Latin American countries. As many higher education organization, Laureate Education, Inc. is affected by the corona crisis, as they write in the form 10-K, for Q4 and full year 2020: « As a result, the full impact of COVID-19 and the scope of any adverse effect on the Company's operations, including any potential impairments, which could be material, cannot be fully determined at this time.» See excerpt from the annual report 2020 in the appendix.	27
3.1	<i>Financial ratios</i> As a new hire you understand that the financial statements changed significantly from the year 2019 to 2020. You wonder in which areas big changes applied. For this, calculate the following financial ratios for both years 2019 and 2020: (a) Current ratio (b) Debt-to-equity ratio (c) EBIT margin Using the values of these ratios, do you see a change in the priorities within the triangle of financial management? How have the different perspectives changed? What reasons do you see for the general significant changes in the Statement of Financial Position?	10
3.2	<i>Payout Ratio</i> As a next step, you are interested in the payout ratio. How is it calculated, what is the opposite ratio, and what conclusions can be drawn from the two ratios in general? What can you conclude respective these two ratios for Laureate Education, Inc. and what are the reasons?	4

3.3	<i>Cost structure</i> Assume Laureate Education, Inc. having fixed costs of TUSD 500. By how much would the revenue of 2020 have had to be higher in order to break even on the result from continuous operation?	4
3.4	<i>Discontinued operation</i> What can you conclude from the position « (Loss) income from discontinued operations» in the statement of profit or loss? What other information in the form 10-K may further support your conclusion?	2
3.5	<i>WACC</i> Calculate the $WACC_{tax}$ for Laureate Education, Inc., using the debt-to-equity ratio of the year 2020 (using 2 decimal places, i.e. x.xx%). For the cost of capital, use the interest expenses of the year 2020 (using 2 decimal places, i.e. x.xx%), assuming them representing the average for «Long-term debt and finance leases, less current portion». The taxes are 20%, the return on equity is 8%.	4
3.6	<i>Selected Assets positions</i> The statement of financial position of Laureate Education, Inc. shows among others the following three non-current asset positions: • Goodwill • Tradenames, net • Long-term assets held for sale Explain what each of the three position represents and assess the reasons for changes between 2019 and 2020.	3

4	Company valuation Online Education, Inc. Laureate Education, Inc. is considering the acquisition of the startup «Online Education, Inc.» (see offer sheet in the appendix). You are asked to prepare the price negotiation with valuation of the company.	16
4.1	<i>Company valuation using DCF method</i> First, you are asked to calculate the net company value of Online Education, Inc. using the DCF method. Your M&A consultant suggest using a $WACC_{tax}$ of 12%. The eternal growth rate g is assumed as 2%. For the calculation, use the information from the «Offer Sheet Online Education, Inc.» for the first three periods (2021 - 2023), and the terminal value for the following periods. Round interim results to 2 decimal places. Then, calculate the net company value to define an offer to Online Education, Inc.	8
4.2	<i>Company valuation using Multiple method</i> Secondly, you are asked to also use a multiple method valuation. According to your M&A consultant, the education industry shows a typical EBITDA multiple of 25. Use this information to calculate the gross and net company value of Online Education, Inc. using the multiple method.	4
4.3	<i>Financial Due Diligence and company valuation</i> Name and explain two examples how the financial due diligence relates to the company valuation.	2
4.4	<i>Due Diligence and decisions</i> Name and explain how the due diligence relates to the M&A decision.	2

5	Multiple-Choice questions Mark for each of the following 15 questions the applicable solution (a, b, c or d) on the attached multiple-choice answer sheet. Only one answer is applicable. Points are only granted if nothing but the applicable answer has been chosen. Unclear or multiple markings will not be considered. For wrong answers, no deductions apply. Please use the attached Multiple-Choice Answer Sheet only! Only this answer sheet will be considered for grading.	45
5.1	Which of the following statements regarding the Laureate Education, Inc. asset positions does apply? (a) By the end of 2020, Laureate Education, Inc. plans to sell more assets than it did by the end of 2019. (b) With lower sales in 2020, the level of receivables is rather expected to decrease, however by the end of 2020 net receivables are higher than by the end of 2019. (c) According to Swiss law, the cash level requires legal action to prevent excessive indebtedness. (d) On average, the property and equipment by end of 2020 is newer than it was by the end of 2019.	3

5.2	Which of the following statements regarding the Laureate Education, Inc. liability and equity positions does apply? (a) Laureate Education, Inc. has authorized shares which have not been issued yet. (b) The position «Retained earnings» indicates that the total of previous years profit was higher than the loss in 2020. (c) All income tax expenses for 2020 were paid, i.e. the income taxes owed to the government did not increase. (d) The current liabilities exceed the non-current liabilities.	3
5.3	Which of the following statements regarding the Laureate Education, Inc. Statement of Cash flows does apply? (a) The cash flow from investing activities indicates Laureate Education, Inc. owning rather old machines. (b) Interest expenses are disclosed as part of the cash flow from investing activities. (c) The cash flow from operating activities shows a declining trend. (d) While cash inflow from discontinued operation was lower in 2020 than in 2019, it was still higher than the total change in cash.	3

5.4	Which of the following statements regarding the Laureate Education, Inc. financial statement for the year 2020 does apply? (a) The increase in «Receivables, net» is the main contribution to the increase in net working capital from 2019 to 2020. (b) Risk-oriented financial ratios are relatively high and have further increased in 2020 compared to 2019. (c) The financial «Days Inventory Hold» has the most significant influence to the «Cash Conversion Cycle». (d) The statement of cash flows indicates, that the compensation approach includes stock options.	3
5.5	In 2017 Lonza acquired 3 companies (Capsugel S.A., PharmaCell B.V., and Micro-Macinazione S.A.). Which of the following statements regarding changes in assets does apply (see annual report excerpt in the annex)? (a) The high increase in assets however much smaller increase in sales may suggest a purchase rather later in the year 2017 than earlier in the year 2017. (b) The increase in «current assets» suggest, that a goodwill was paid by Lonza. (c) The change in tangible assets leads to a net cash inflow. (d) As Lonza does not disclose details for «non-current assets», none of the above statements can be concluded.	3

5.6	In 2017 Lonza acquired 3 companies (Capsugel S.A., PharmaCell B.V., and Micro-Macinazione S.A.). Which of the following statements regarding changes in liabilities does apply (see annual report excerpt in the annex)? (a) The «Non-controlling interests» of 48 (million CHF) indicates, that not the full purchase price was paid yet. (b) Because the increase in non-current liabilities is below 50% of the increase in assets, a badwill was paid by Lonza. (c) The «Liabilities held for sale» in 2016 indicate, that in 2017 some daughter companies or business units were sold or spun-off. (d) None of the above statements can be concluded based on the information available in the financial statement.	3
5.7	In 2017 Lonza acquired 3 companies (Capsugel S.A., PharmaCell B.V., and Micro-Macinazione S.A.). Which of the following statements regarding Cash flow from financing activities does apply (see annual report excerpt in the annex)? (a) Prior to the acquisition Capsugel S.A. paid back all debt, Lonza took over Capsugel S.A. free of debt. (b) In 2017, the shareholders' capital was not increased, selected transactions also decreased shareholders' capital. (c) The «non-current debt» include an «acquisition bridge financing». (d) As Lonza does not disclose details for «Acquisition of subsidiaries, net of cash acquired», none of the above statements can be concluded.	3

5.8	Which of the following statements regarding the Lonza financial statement for the year 2017 does apply (see annual report excerpt in the annex)? (a) Lonza used the direct calculation for the calculation of Cash Flow from operating activities. (b) Lonza choses to disclose interest paid and interest received as part of different cash flows. (c) After the acquisition, in 2017 the gross profit margin has decreased compared to 2016. (d) With the acquisitions in 2017, Lonza must pay more taxes compared to 2016.	3
5.9	Which of the following statements regarding the higher education industry does NOT apply? (a) The percentage of students per market segment, and the revenue share per market segment may differ. (b) Government agencies have a significant influence on applicable enrolment conditions and fees. (c) For public education organizations, even a small loss in one year oftentimes leads to a loss in capital. (d) For higher education organizations founded and registered as Swiss capital company: if the total assets are lower than total liabilities, the organization is required to go to court.	3

5.10	Which of the following statements regarding reasons for success of M&A transactions discussed in the course applies? (a) Facebook acquiring WhatsApp in 2014 is seen as unsuccessful because the price paid was very high compared to the synergies in marketing contracts. (b) Bayer acquiring Monsanto in 2019 is seen as successful because the inside knowledge of Bayer shows that the negative news around Glyphosat are exaggerated. (c) The acquisition of Sanitec by Geberit in 2015 led to a significantly lower equity ratio of Geberit. Because of the financing chosen by Geberit, this effect will persist long-term. (d) Selling subsidiaries allowed Laureate Education, Inc. to reducing market reach as well as the service portfolio and therewith the risk and exposure from the corona crisis.	3
5.11	Currently, company X has a dept-to-equity ratio of 100%. The average cost of equity is 13%, the average cost for liabilities is 2%. The tax rate of company X is 20%. What is the tax-adjusted weighted average cost of capital for company X? (a) 1.60% (b) 6.00% (c) 7.30% (d) 7.50%	3

5.12	As per December 31, 2019, «HanseTrade Ltd.» disclosed an inventory of 3 million items, valued at CHF 45.0 million, i.e. with an average purchasing value of CHF 15. During 2020, the following transactions apply: • March 26, 2020: purchase of 2 million items at a price of CHF 12 per item. • June 15, 2020: purchase of 3.5 million items at a price of CHF 11 per item. During the year 2020, a total of 6.0 million items were sold. The «HanseTrade Ltd.» discloses an inventory value of CHF 27.5 million as per year end. Which valuation method did «HanseTrade Ltd.» use to calculate the value of the inventory as per December 31, 2020? (a) LIFO (b) Weighted average cost method (c) FIFO (d) With the information provided, the question cannot be answered.	3
5.13	A company buys inventory items against invoice for CHF 2.5 million, it pays CHF 1 million to a customer (who won a legal case against the company, from provisions), and pays an investment of CHF 5 million in cash. How do these transactions influence the Cash Flow of the company? (a) Cash Flow changes by plus CHF 1 million. (b) Cash Flow changes by minus CHF 1.5 million. (c) Cash Flow changes by minus CHF 6 million. (d) Cash Flow changes by minus CHF 7.5 million.	3

5.14	In the year 2020, Nestlé sold its daughter company Nestlé Skin Health for CHF 9.7 billion. As per transaction date, the assets of Nestlé Skin Health were valued at CHF 7.3 billion, and the liabilities CHF 3.1 billion. The buyer, Abu Dhabi Investment Authority (ADIA), revalued the assets higher by CHF 2.1 billion. What is the goodwill which ADIA will disclose for this acquisition? (a) CHF 2.4 billion (b) CHF 3.4 billion. (c) CHF 4.5 billion. (d) With the information provided, calculation of goodwill is not possible.	3
5.15	At the beginning of the year 2019, the equity of HighGro Ltd. was CHF 4.8 million. During the year, current assets increased by CHF 0.5 million, the non-current assets increased by CHF 1.5 million. Current liabilities increased by CHF 0.1 million, non-current liabilities increased by CHF 0.9 million. The shareholders' capital remained unchanged. The profit of the year was CHF 1.3 million. How much was distributed to the shareholders based on the information above? (a) CHF 0 (b) CHF 30 000 (c) CHF 300 000 (d) CHF 1.3 million	3

End of the examination questions – pages 19 – 25 are the following separate annex:

- ***Laureate Education, Inc. form 10-K excerpt (for questions 3 and 5)***
- ***Online Education, Inc. offer sheet for M&A (for question 4)***
- ***Lonza annual report excerpt, a swiss pharmaceutical company, for some of the multiple-choice questions (question 5).***